## NOTES ON THE GENUS HUXLEYA (VERBENACEAE)

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Lack of time this late in life prevents preparation of the detailed monograph of this genus as originally planned and announced, but it has been considered advisable to place on record here the bibliographic notes assembled by my wife, Alma L. Moldenke, and myself since the work on this family of plants was initiated in 1929. This is the 65th genus so treated by us in this extensive series of papers in this (and some other) journals.

HUXLEYA Ewart, Proc. Roy. Soc. Victoria, ser. 2, 25: 109, pl. 5. 1912.

Bibliography: Ewart & Rees, Proc. Roy. Soc. Victoria, ser. 2, 25: 109--[111], pl. 5. 1912; Wangerin, Justs Bot. Jahresber. 40 (1): 862. 1914; Prain, Ind. Kew. Suppl. 5, imp. 1, 137. 1921; Fedde & Schust., Justs Bot. Jahresber. 43: 158 & 159. 1922; Junell, Symb. Bot. Upsal. 1 (4): 111--112 & 203. 1934; Mold., Alph. List Inv. Names 27. 1942; Mold., Known Geogr. Distrib. Verbenac., ed. 1, 69 & 93. 1942; H. N. & A. L. Mold., Pl. Life 2: 34 & 65. 1948; Mold., Known Geogr. Distrib. Verbenac., ed. 2, 153 & 186. 1949; Mold., Résumé 209, 301, 411, & 457. 1959; Prain, Ind. Kew. Suppl. 5, imp. 2, 137. 1960; F. A. Barkley, List Ord. Fam. Anthoph. 76 & 174. 1965; Airy Shaw in J. C. Willis, Dict. Flow. Pl., ed. 7, 461. 1966; L. S. Sm., Contrib. Queensl. Herb. 6: 20. 1969; Rouleau, Guide Ind. Kew. 95 & 352. 1970; Mold., Fifth Summ. 1: 346 (1971) and 2: 531, 760, & 881. 1971; Airy Shaw in J. C. Willis, Dict. Flow. Pl., ed. 8, 575. 1973; Mold., Phytol. Mem. 3: 337 & 550. 1981.

Erect herbaceous plants; leaves simple, elongate-linear or filiform, opposite or alternate, exstipulate; flowers rather large, solitary, axillary, without bracteoles, complete, perfect; calyx gamosepalous, inferior, campanulate, deeply 5-cleft; corolla gamopetalous, hypocrateriform, the tube narrow-cylindric, elongate, about equal in width throughout, the limb spreading, 5cleft; stamens 4, inserted in the corolla-tube and exserted from it, isometrous, all fertile; anthers bilocular, each theca dehiscing longitudinally; pistil single, apparently 1-carpellary by reduction; style elongate; stigma terminal, slightly bifid; ovary superior, 2celled, apically distinctly 2- or 4-lobed, each cell containing one anatropous ovule laterally attached near the base.

Type species: Huxleya linifolia Ewart & Rees.

This apparently monotypic genus of northern Australia is named in honor of Thomas Henry Huxley (1825--1895), famous English naturalist and author, friend and champion of Charles Darwin.

According to Ewart & Rees (1912) this "genus differs from Faradaya, the only other Australian genus of this sub-order, in having the calyx 5-lobed (instead of 2), 5-lobed corolla (instead of 4), equal stamens (not didynamous), ovary 2-celled (not 4), in being an upright herb (not a woody climber), in the flowers solitary (instead of in terminal panicles). These distinctions are almost sufficient to make an additional sub-tribe" in the tribe Viticeae of the family Verbenaceae. In fact, these authors actually do propose a subtribe Oxereae. The genus is presently classified in tribe Clerodendreae.

HUXLEYA LINIFOLIA Ewart & Rees, Proc. Roy. Soc. Victoria, ser. 2, 25: 109, pl. 5. 1912.

Synonymy: Huxleya linifolia Ewart apud Fedde & Schust., Justs Bot. Jahresber. 43: 159. 1922. Huxleya inifolia Ewart & Rees ex Mold., Alph. List Inv. Names 27, in syn. 1942.

Bibliography: see the bibliography for the genus as a whole (above).

Illustrations: Ewart & Rees, Proc. Roy. Soc. Victoria, ser. 2, 25: [111], pl. 5. 1912.

An erect herbaceous plant, about 30 cm. tall; stems tetragonal, canaliculate, glabrous; leaves linear, opposite or sometimes alternate toward the base of the stems, 4--7.5 cm. long, sparsely pitted with minute glands beneath; flowers long-pedicellate, borne in the axils of leaves (usually 2) near the apex of the stems, without bracteoles; calyx basally tubular, about 1 cm. long, apically ampliate-patent and 5-lobed, the lobes narrow, apically acuminate, externally sparsely hairy; corolla-tube about 2.5 cm. long, the lobes subobovate, about half as long as the tube, equal in size and shape or nearly so, with tufts of hair at their base; stamens exserted, the filaments attached to the inside of the corolla-tube below its rim and protruding about 3 mm. beyond it; anthers somewhat sagittate, apically bluntly pointed; style about 2.5 cm. long; stigma slightly bifid and reaching to the mouth of the corolla-tube; fruit not known.

This apparently endemic species, type species of the genus, is based on a collection made by Maurice William Holtze (1840--1923), noted German botanist, successor to Sir Moritz Richard Schomburgk (1811--1890) as director of the Botanical Garden at Adelaide. The collection was made at or near Port Darwin, Northern Australia, in 1892.

Junell (1934) comments that "Leider stand mir kein Untersuchungsmaterial von dieser Pflanze zur Verfügung. Es is nocht ausgeschlossen, dass auch bei dieser Subtribus eine Reduktion des einer Fruchtblatts im Gynäceum erfolgt ist. Da jedoch laut Beschreibung.....und beigefügter Figur....die Stellung der Samenanlagen vollkommen verschieden von der bei den anferen Gattungen zu sein scheint, und da die Pflanze auch sonst einen stark abweichendem Bau besitzt, ist es meines Erachtens sehr unwahrscheinlich, dass ihr Pflanze im System in dieser Subtribus [*Clerodendreae*] zu suchen ist."

Like Junell, I, too, have thus far not seen any authentic material of this apparently rare plant.

Citations: MOUNTED ILLUSTRATIONS: Ewart & Rees, Proc. Roy. Soc. Victoria, ser. 2, 25: pl. 5. 1912 (Z).